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ABSTRACT

To determine the relationship between eighth grade students' motivation to study and the number of hours they spend in viewing television, a study interviewed 210 eighth-grade students in central Georgia concerning their daily television viewing habits. Subjects completed the Wells-Bledsoe Motivation Checklist and provided information about their families, and home and school activities. Information was also obtained concerning intelligence scores and scores on a standardized achievement test. Results showed a slight difference in the number of hours of viewing time per day and per week between white and non-white boys and girls. The relationship between total number of hours viewing time and motivation was insignificant. Monday viewing, however, correlated significantly with positive motivation scores in a stepwise regression analysis. (Four tables of data and 14 references are appended.) (MM)

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Television and the Child's Motivation to Perform Well in School

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Abstract

The relationship between television viewing and the adolescent's motivation to perform well in school was the subject under investigation in this study. Two hundred and ten eighth grade students completed the Wells-Bledsoe Motivation Checklist and provided information about their families and home and school activities. Information was also obtained concerning intelligence scores and scores on a standardized achievement test. Results showed a slight difference in the number of hours of viewing time per day and per week between white and non-white boys and girls. The relationship between total number of hours viewing time and motivation was insignificant. Monday viewing, however, correlated significantly with positive motivation scores in a stepwise regression analysis.

Television and the Child's Motivation
to Perform Well in School

Ever since the national hue and cry over the levels of student achievement began, there has been a search for a scapegoat to blame for this alleged failure of public education. One villain selected as responsible is the amount of time a child spends in front of a television set. More specifically, failure to reach a desired level of reading achievement is directly tied to a large number of hours spent in television viewing.

According to the latest figures 98% of all American homes have televisions and somewhere between four to six hours are spent in television viewing each day (Barth and Swiss, 1976). The school age child, from the time he enters the first grade until the time he graduates from high school, spends 16,000 hours viewing television while spending only 12,000 hours in school (Postman, 1979).

Never-the-less, empirical research in this area has failed to prove conclusively that a negative relationship exists between television viewing time and reading achievement. Those studies which have found a significant negative correlation between the level of reading achievement and the number of hours spent viewing television have found the correlation to be very small. In addition, a number of studies have found there to be no correlation at all.

Some studies have even indicated there may be a slight positive correlation between the level of reading achievement and the hours spent viewing television for students in the very early grades.

According to a study by Schramn, Lyle, and Parker (1961), the turning point between a positive and negative correlation occurs somewhere during the middle school grade levels, the sixth to the eighth grades. This set the foundation for selecting the grade levels of this study.

In reviewing the literature, it was found that the 1961 study of Schramn, Lyle, and Parker is one of the most widely accepted pieces of research in this area because it was conducted during a time when students could be included who had no television in their home, a situation which it is virtually impossible to reproduce today.

These researchers found the amount of time spent viewing television gradually increased from the time the student entered school until it reached a maximum level, sometime between the beginning of the sixth grade and the end of the eighth grade. From this point it began to decrease gradually.

Busch (1978), in a study replicating the 1961 Schramn study, found that the grade levels for maximum television viewing time has slipped to the fourth, fifth and six grades and that there remained a positive effect for the first three grades with a slightly negative effect on reading achievement for all grades after the sixth year.

In a study dealing with fifth and sixth grade students Fisher and Bruss (1976) found no relationship between the time spent viewing television and reading achievement or aptitude.

Moldenhauer and Miller (1980) reported in a study of seventh grade students no relationship between the number of hours spent viewing television and the level of reading achievement.

In a research synthesis Williams, Haertel, Haertel, and Walberg (1980) integrated the empirical findings of 23 educational and psychological review articles, doctoral dissertations, state-wide assessments, national surveys, articles from refereed journals, technical reports, books and unpublished papers.

The students in the combined studies ranged in grades from kindergarten through high school. The overall correlation of hours of television viewing time to school achievement was a small but negative correlation of -.05. The overall effect, however, was not consistent across the range of viewing time. Up to 10 hours of television viewing a week had a slightly positive effect. More than 10 hours produced a negative effect which gradually increased as the number of hours increased up to a level of 35 to 40 hours viewing time, at which point a further increase in the number of hours of viewing time brought about no further increase in the negative effect. Students with

higher I.Q.'s appeared to be more negatively affected than other groups of students.

In a 1982 study, Ridley-Johnson, Cooper and Chance conducted a study using students from the fifth through the eighth grades. In a survey of student television viewing time, which was compared with reading and math grades from report cards as measures of achievement, it was determined that reading achievement showed a slightly negative correlation with viewing time while math achievement showed no significant correlation.

In a study of over 7,500 students from the fourth, eighth, and eleventh grades, fourth graders were again found to be the heaviest television viewers with a slight decrease in time for the eighth graders and a major decrease for eleventh graders (Neuman and Prowda, 1982). Here, a weak negative correlation between television viewing time and reading achievement was found for all three grade levels.

A 1980 study by Zuckerman, Singer, and Singer of third, fourth, and fifth graders, showed no correlation between television viewing time and reading ability at any of the grade levels. In spite of the fact that the range of television viewing time was from one to forty hours, the average time was only fifteen hours, which may have played some part in the failure to find any correlation of significance.

In a study which described the television viewing habits of sixth grade children in the suburbs of Melbourne, Australia, a diary was kept for a seven-day period of students' viewing habits while their classroom teachers filled out questionnaires on student achievement (Sharman, 1979). The mean average viewing time for the group was 28.3 hours, with 25% of the group viewing in excess of 40 hours; however, there was no significant difference between the viewing time for boys and girls.

On the basis of a simple correlation, heavy viewers appeared to do less well in school achievement than light to average viewers. Students of high intelligence generally watched less television than those of average to lower intelligence, and students of parents with higher levels of education watched less commercial television and more public television.

A recent study of over 10,000 sixth grade students in 316 California elementary and middle schools showed a significant relationship between heavy television viewing and lower school achievement (Fetler and Carlson, 1982). In addition, heavy television viewers were of lower socioeconomic standing and had a preference for programs of light entertainment. They did their homework in front of the television and watched later at night as well as in the morning before school.

Light viewers were above average in school achievement and from above average socioeconomic backgrounds. They tended not to watch what they wanted, not to watch late at night or early in the morning, and not to do their homework in front of the television.

When socioeconomic standing and prior achievement were controlled, a negative relationship remained between achievement and television viewing.

There was a negative association between certain shows which were popular among heavy viewers and school achievement. Only three shows were positively associated with achievement. This positive relationship diminished nearly to zero when socioeconomic status and prior achievement were controlled.

In a recent article for the University of Pennsylvania's Journal of Communication based on this study, Fetler stated that while achievement scores were sharply lower for students who watch six or more hours of television a day, they were higher for moderate viewers than for those students who watched very little.

A common factor which ran through all of those studies finding a slight negative correlation between television viewing of students and their school achievement was the fact that the heavy viewers watched so much television that their viewing would have had a negative effect on almost any other variable. England (1981) said it this way:

> Now, even without conflicting evidence, one would be foolish to argue that heavy television viewers will do just as well on school-related tasks (such as taking exams) as light television viewers. (One could perhaps as readily accept--without evidence--the postulate that

children who work outside of school for an average of four hours a day similarly would perform less satisfactorily than those who do not. (p. 31)

The research in this area produced little hard evidence to show that an average amount of television viewing by students at any grade level of school would be negatively related to their scholastic achievement.

The purpose of this study was to determine the relationship between eighth grade students' motivation to study and the number of hours they spent in viewing television.

Method

Two hundred and ten eighth grade students from a junior high school located in a small school system (14,500 a.d.a.) in the central area of Georgia were interviewed concerning their daily television viewing habits. They were also asked to provide certain information relevant to validation of the Wells-Bledsoe Motivation Checklist (Wells and Bledsoe, 1984), and to provide information about their families, such as the number of siblings in the home, the level of parents' education, etc.

Table I shows the mean number of hours viewing time and standard deviations for daily TV watching of the total group. Those were as follows: Monday, M = 2.87, SD = 2.09; Tuesday, M = 2.98, SD = 2.13; Wednesday, M = 3.04, SD = 2.18; Thursday, M = 3.07, SD = 2.07; Friday, M = 3.6, SD = 2.81; Saturday,

M = 4.74, SD = 3.44; Sunday, M = 3.75, SD = 2.35. The mean for the week was 23.42 hours, SD = 13.88.

Boys watched more television than girls. For white boys the number of viewing hours ranged from 4.5 hours to 66 hours per week, M = 22.96, SD = 12.42. For nonwhite boys the range was from 6 to 68 hours, M = 28.48, SD = 13.46. The range for white girls was from 3 hours to 58.5 hours, M = 22.58, SD = 12.44 and for nonwhite girls, the range was 4 hours to 48 hours, M = 26.06, SD = 13.51. These are shown in Table II.

No significant relationship was found between the number of viewing hours per day or per week and the student's performance in school as measured by the Iowa Test of Basic Skills.

However, significant correlations were obtained with the Wells-Bledsoe Motivation Checklist, a two-factor solution of negative and positive behaviors related to the student's desire to perform well in school, and to four other items on the questionnaire. Watching television on Wednesdays was significantly related to Factor I---22 items consisting of negative motivating elements, ($r = .14$, $P < .03$). For Factor II, 23 positive motivating elements, the following correlations were obtained: Monday ($r = .17$, $P < .01$); Tuesday ($r = .16$, $P < .02$); Wednesday ($r = .15$, $P < .02$); Friday ($r = .13$, $P < .05$); total viewing time ($r = .15$, $P < .0001$).

Among socioeconomic variables studied, Wednesday television viewing was negatively related to the number of siblings in the home, ($r = -.15$, $P < .03$). Friday televiewing was negatively related to the mother's age, ($r = -.15$, $P < .02$) but positively related to the student's perception of how hard he worked to get good grades in school, a 5-point self-rating scale, ($r = .17$, $P < .01$).

Watching television on Saturday was negatively related to the amount of allowance the student received ($r = -.18$, $P = < .006$). These relationships are shown in Table III.

In a stepwise multiple regression analysis (Statistical Analysis Systems) of student variables related to the positive motivation factor, only the Monday televiewing hours emerged as significant among the eight TV variables (total viewing time and that of each weekday). Altogether, 27% of the variance was accounted for by seven variables, with Monday television an increase in R^2 of .04 ($R = .45$, $F_{210} = 14.28$).

The TV variable was the fourth to enter the equation. Other variables in the order of their appearance were: the student's desire to perform well in school; the number of school organizations to which the student belonged; how hard the student worked to get good grades; whether the student's father was living; the number of years of school completed by the mother; intelligence, as measured by the Otis-Lennon test. These results are shown in Table IV.

Conclusions

Several studies have demonstrated that television viewing has a negligible relationship to the child's performance in school, including overall grades as well as those in specific areas such as reading and mathematics. Whether the number of hours spent before the television set during the week was related to the child's motivation to study, as measured by the Wells-Bledsoe Motivation Checklist, was the subject of this study. Only the positive factor of this two-factor checklist was used inasmuch as, by inspection of a correlation matrix, not enough correlates related to the negative factor to justify use of computer time for the analysis.

The number of hours spent viewing television on a daily and weekly basis were well within the limits reported in other studies. Although some variation in viewing time was noted by race and sex, these were not significant.

A stepwise multiple regression analysis using the positive motivation factor as the dependent variable identified seven variables significantly related to this factor. Among them were the number of hours spent viewing television on Mondays. This variable accounted for four percent of the variance in the equation.

Pearson Product Moment correlations showed weak but significant relationships between television viewing and certain socioeconomic variables, such as the number of

siblings in the home or the mother's age, but these were not the thrust of this study.

The number of hours spent viewing television on Mondays alone related weakly to the child's motivation to perform well in school.

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Table I

Daily Televiewing Viewing Pattern of Eighth Grade Students

Day	M	SD
Monday	2.87	2.09
Tuesday	2.98	2.13
Wednesday	3.04	2.18
Thursday	3.07	2.07
Friday	3.6	2.81
Saturday	4.74	3.44
Sunday	3.75	2.35
Total	23.42	13.88

Table II

Weekly Televiewing Viewing Pattern
of Eighth Grade Students

	N	M	SD	Minimum	Maximum
White Males	66	22.96	12.42	4.5	66
Nonwhite Males	41	28.48	13.46	6	68
White Females	40	22.58	12.44	3.0	58.5
Nonwhite Females	53	26.06	13.51	4.0	58

Table III

Correlations and Levels of Significance of
Variables Related to Television Viewing Times*

Viewing Time	Variables Significantly Related to Viewing Time					
	Factor I	Factor II	Siblings in Home	Mother's Age	Amount of Allowance	How Hard Student Works for Grades
Monday	--	17(01)**	--	--	--	--
Tuesday	--	16(02)	--	--	--	--
Wednesday	14(03)	15(02)	-15(02)	--	--	--
Thursday	--	--	--	--	--	--
Friday	--	13(05)	--	-15(02)	--	17(01)
Saturday	--	--	--	--	-18(006)	--
Total	--	15(0001)	--	--	--	--

*Decimals omitted
**Significance levels in parenthesis